Full-Color LED Multi-Window Video Processor

User Manual



Safety precautions

Danger

• High voltage exists in the device and non-professional maintenance personnel shall never open its back cover, lest risks happen.



•This is not a waterproof device, so appropriate waterproof measures shall be taken in a damp environment;

•Never have this device kept near any fire source or high temperature environment;

• If this device gives out strange noise, smoke or smell, unplug the battery socket immediately and contact with its dealer;

•Never plug/unplug any charged VGA, DVI or HDMI signal cable.



1. Please read this Manual carefully before operation and keep it properly for future use.

2. In the case of lightning or long-term downtime, please unplug the power socket.

3. This device is not suitable for non-professional debugging or operation, so please use it under the guidance of professionals;

- 4. Never force anything into this device from its air vent, lest device damages or accidents happen;
- 5. This device should not be placed or used near water or wherever wet;
- 6. This device should not be placed or used near cooling fins or wherever hot;
- 7. Please clear up and keep the power lines properly to prevent damages;
- 8. If the following situations occur, unplug the power socket of this device and contact for maintenance:
 - •When this device is contaminated with liquid;
 - •When this device is dropped or its framework is damaged;
 - •When this device suffers from significant dysfunction or obvious performance deterioration

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I. Product descriptions

With the rapid development of the LED display industry and the growing demands for applications, all control requirements arise at the right moment for controlling of the large-screen control system. However, due to the limitations to the large-screen control system in image processing, frame control and signal format conversion, the LED large-screen control system is somewhat weak and can not meet users' needs mainly because:

1. The signal source access format is limited for LED large-screen control systems and currently only the digital DVI signal can be used, but many signal sources (for example, VGA, etc.) can't be directly displayed on an LED led screen through the control system;

2. The traditional signal acquisition card is poor in its image processing effect, which will have the image definition suffer from bigger loss during signal format conversion;

3. The LED large-screen control system can only capture and display the images at the corresponding pixels on the LED led screen, while some users need casual display of partial or complete computer desk pictures freely at the scene;

4. With the constant decrease of the LED screen spacing and the constant increase of the on-screen pixels, the era will no longer exist for a single loaded card to display a single frame on a single display screen and more application and display demands will be highlighted, so the LED large-screen control system can not properly satisfy customer's needs unless better cooperation is available with other peripheral device.

For the above problems, our company has independently researched and developed many video processing products. Our products have integrated advanced control and image processing technology, not only able to achieve rapid and stable signal switching but also able to complete multi-layer processing of images. In addition, such products can be controlled and operated simply and conveniently through the device keyboard and PC.

II. Product features

1. Support independent operation on the control panel; the knob and number key design offers more convenience for device use;

2. Support host PC software control to realize visual and quick operation by virtue of the software operation and display synchronization;

3. Support perfect fade-in and fade-out switching;

4. Support image display enhancement on brightness and contrast;

5. Support double-window display for arbitrary roaming among PIP, POP and window location;

6. Support arbitrary frame size zooming (The window is adjustable point by point, able to be reduced to a pixel);

7. Support the motion compensation to eliminate picture tailing;

8. Support the noise reduction processing to reduce the noise stains;

9. Support HSD video signal input (8 channels, SDI optional), audio input (4 channels) and audio output (1 channel);

10. Support the maximum output resolution of 2560×1536;

11. Support the keyboard lock function to prevent wrong operation of the field personnel after construction debugging;

12. Support to save and call five scene modes;

13. Support shortcut settings (smart settings) of the navigation;

14. The international 1.5U standard height can facilitate handling and installation;

15. Support wireless remote control corresponding to the buttons on the front panel one by one, with the interface specifically as follows (See the front panel structure for details):

III. Technical specifications

The video processor has integrated the latest patented video processing technology, able to manage the video conversion of arbitrary format input and corresponding format output as well as process and enhance such video signals as CVBS (composite video), HDMI, VGA (RGB) and DVI-D to meet customers' application requirements. The detailed specifications are as follows:

Compound (BNC input)		
Number of Inputs	3	
Supported Standards	PAL/NTSC	
Signal Level	1Vpp±3db (0.7V Video+0.3v Sync) 75Ω terminal interface	
HDMI input		
Number of Inputs	1	
Supported Standards	HDMI 1.3 , EDID 1.3	
Signal Level	1Vpp±3dB (0.7V Video+0.3v Sync) 75Ω terminal interface	
VGA (DB15 input)		
Number of Inputs	2	
Interface form	Standard DB15 socket	
Supported Resolution	VGA-UXGA	
Signal Level	R, G, B, Hsync,Vsync:0 to1Vpp±3dB (0.7V Video+0.3v Sync) 75Ω terminal interface Black level: 300mV Sync-tip: 0V	
DVI Input		
Number of Inputs	1	
Input interface form (Connector)	Standard DVI-D socket	
Supported Resolution	SMPTE: 625/25 PAL, 525/29.97 NTSC, 625/50p PAL, 525/59.94p NTSC, 1080P60,1080i50, 1080i59.94/60, 720p50 and 720p59.94/60 VESA: 800×600@60Hz, 1024×768@60Hz, 1280×768@60Hz, 1280×1024@60Hz, 1600×1200@60Hz, 1920×1080@60Hz	
Signal Level	TMDS level, single pixel input, 165MHZ bandwidth	
Standard	DVI 1.1	

DVI Output		
Number of Outputs	2	
Interface form	Standard DVI-D interface	
	1024×768@60Hz,1280×1024@60Hz	
	1366×768@60Hz,1440×900@60Hz	
Supported output resolution	1600×1200@60Hz, 1680×1050@60Hz	
	1920×1080@60Hz,1920×1200@60Hz	
	1536×1536@60Hz, 2560×1536@60Hz	
Signal level	TMDS level, 165MHZ bandwidth	
Auxiliary		
	BS EN 55013:2001+A1:2003+A2:2006	
	BS EN 61000-3-2:2006+A2:2009	
"CE" standard certification	BS EN 6100-3-3:2008	
	BS EN 55020:2007	
	BS EN 6006:2002+A1:2006+A11:2008	
Computer control	RS232	
Power supply	85-264V 2A IEC-3 power supply interface	
Work environment	0 °C~45 °C	
Storage environment	10% to 90%	
Product warranty	3-year-long limited warranty	

IV Work schematic diagram



V. Panel structure

Front panel



(1) POWER - Device switch, OFF (Power OFF), ON (Power ON)

- (2) LCD Text display screen, able to display the menu, parameters and other information
- (3) (13) WIN1, WIN2 Window 1 and Window 2, click on the main menu to set the frame parameters
- (4) (5) (6) CV1~3 Keys for compound signal channels
- (7) HDMI- Key for HD multimedia channel
- (8) PIP Key for double-window shortcut setting
- (9) MODE User mode call
- (10) MENU Main Menu
- (11) OK Enter key
- (12) ADJUST Key for increase/decrease; press down and it can act as an Enter key
- (14) (15) VGA Key for analog signal channel
- (16) DVI Key for digital signal channel
- (17) SDI Serial digital interface
- (18) OUT Switching among black screen, blue screen and normal
- (19) PART Partial/Full View switching
- (20) Navigation key User navigation mode, acting as a step length adjuster in time of data regulation
- (21) Arrow mark Backspace key
- (22) FIR Infrared sensing

Back panel



(1) COM -1	Host PC software interface
(2) SDI	SDI signal input interface for high-definition cameras, etc.
(3) HDMI	HDMI signal input interface for laptops, etc.
(4) DVI	DVI signal input interface for desktops, etc.
(5)(6) VGA	VGA signal input interface for laptops, etc.
(7)(8)(9) CV-1/2/3	Compound signal input interfaces for cameras, etc.
(10)(11) DVI-OUT1/2	DVI output to connect transmitter cards, etc.
(12) Power port	220V power port
(13)(14) CARD-1/2	Transmitter card slot, able to accommodate transmitter cards (with built-in

5V power supply line provided)

VI. Wiring and installation

Wiring diagram



LED screen

Installation steps

1. First of all, it should be ensured that the graphics card can directly control the transmitter card and the led screen can display images normally when the video processor is not used;

2. Then complete wiring as shown in the diagram, connect the DVI interface of the graphics card to the DVI-IN port of the video processor and then connect the DVI-OUT port of the processor to the transmitter card;

3. After correct wiring is ensured, power on to enable the video processor.

Note: To facilitate customers' flexible and convenient operation, the processor can accommodate the transmitter card, namely, the transmitter card can be installed in the processor and powered on by the processor, which thus has eliminated the limitation that the transmitter card must be powered on by a desktop. The installation method is detailed as follows:

① Remove the anchorage corner on the transmitter card;

2 Unscrew and pull out the knobs on the rear panel, and then remove the temporary baffle;

③ In the processor, there will be a four-wire small plug reserved corresponding to the wire slot on the transmitter card; connect them and fix the transmitter card to the video processor;

④ Fit the drawer box again in place and then just short-circuit the upper and lower DVI interfaces.

VII. Settings

Full-screen

The setting method depends on the following four kinds of circumstances:

- 1. A transmitter card has one frame enabled;
- 2. A transmitter card has two frames enabled;
- 3. Two transmitter cards have one frame enabled;
- 4. Two transmitter cards have two frames enabled.

Here follow the detailed method for debugging under such four kinds of circumstances.

1. One transmitter card has one frame enabled;

Step 1: Click on "MENU" to enter the "Main MENU" interface.



Note: Turn the knob and you can select different functions; click "OK" to confirm the selected function. Step 2: Click "Device Mode" to enter the interface for device mode options and select "Copy Mode".



Step 3: Click "OK" to enter the "Out Format" interface, and if the led screen pixels are fewer than 1920 x 1080, select the first item "Not Change" but if the led screen pixels are more than 1920 x 1080, select the second item "Change" to enter the "Out Format" interface and then select a resolution larger than the on-screen pixels.



Step 4: Click "OK" to enter the "Panel Para" interface and input the actual on-screen pixels of the screen width and height respectively.

Panel Para		
H Size	1920 Step×1	
V Size	1080	
Press OK to next		

Note: The numerical value can be changed as follows:

1) You can use the knob to adjust it (leftward to decrease while rightward to increase) with the adjustment step size changed by means of 📧

	DVI HDMI VGA BRI MODE 1 2 3 4 5	
2) Directly enter the numeric key	CV1 CV2 USB OUT PART 6 7 8 9 0	to complete changes.

Step 5: Click "OK" to return to the "Main Menu" interface and select "Save".

Save mode			
*	【Mode Mode	1] 2	Note
	Mode Mode	3 4	
	Mode	5	

Step 6: Select "Mode 1", click "OK" and it will prompt "Saved Successfully". That's all for device debugging.

2. One transmitter card has two frames enabled;



Step 1: Click on "MENU" to enter the "Main MENU" interface.

Note: Turn the knob and you can select different functions; click "OK" to confirm the selected function. Step 2: Click "Device Mode" to enter the interface for device mode options and select "Copy Mode".

Device Mode	
Copy Mode ★ Split Mode Monitor Mode Press OK to next	

Step 3: Click "OK" to enter the "Out Format" interface, and if the led screen pixels are fewer than 1920 x 1080, select the first item "Not Change" but if the led screen pixels are more than 1920 x 1080, select the second item "Change" to enter the "Out Format" interface and then select a resolution larger than the on-screen pixels.



Step 4: Click "OK" to enter the "Panel Para" interface and input the actual on-screen pixels of the screen width and height respectively.

Panel Para		
H Size	1920 Step×1	
V Size	1080	
Press OK to next		

Note: The numerical value can be changed as follows:

1) You can use the knob to adjust it (leftward to decrease while rightward to increase) with the adjustment step size changed by means of

	DVIHDMIVGABRIMODE12345	
2) Directly enter the numeric key		to complete changes.
	$\begin{bmatrix} CV1 \\ 6 \end{bmatrix} \begin{bmatrix} CV2 \\ 7 \end{bmatrix} \begin{bmatrix} 0SB \\ 8 \end{bmatrix} \begin{bmatrix} OU1 \\ 9 \end{bmatrix} \begin{bmatrix} PARI \\ 0 \end{bmatrix}$	

Step 5: Click "OK" to return to the "Main Menu". Click the button "PIP" on the front panel and the interface "Layout" will appear; turn the knob to select "POP" and click "OK".

	Layout
*	POP 【PIP】
	SINGLE

Note: Select "PIP", click "OK" and a red square will appear behind "PIP", which indicates that it has been successfully selected; after selected, it will not jump to the "Main Menu" interface automatically and you need to click on "MENU" to return to the "Main Menu" interface.

Step 6: Click the "MENU" button on the front panel, select "Scaler" in the "Main Menu" to enter the "Image 1 Para" interface and then you can set the location and size of the first image.

Image 1 Para		
H Pos	0	
V Pos	0	
H Size	0	
V Size	0	

Step 7: Click the "WIN2" button on the front panel to enter the "Image 2 Para" interface and you can enter the location and size respectively of the second image.

Image 2	Para
H Pos	0
V Pos	0
H Size	0
V Size	0

Note: After the "Image 1 Para" has been entered, you do not need to click "OK" but just click "WIN2" to enter the "Image 2 Para" interface; after the "Image 2 Para" has been entered, then click "OK".

Step 8: Click "OK" to return to the "Main Menu" interface and then select "Save Mode".

Save Mode			
★ 【Mode Mode Mode Mode Mode	1 】 2 3 4 5	Note	

Step 9: Select "Mode 1", click "OK" and it will prompt "Saved Successfully". That's all for device debugging.

3. Two transmitter cards have one frame enabled;



Step 1: Click on "MENU" to enter the "Main MENU" interface.

Note: Turn the knob and you can select different functions; click "OK" to confirm the selected function.

Step 2: Click "Device Mode" to enter the interface for device mode options and select "Split Mode".

Device Mode		
Copy Mode ★ Split Mode Monitor Mode		

Step 3: Click "OK" to enter the "Out Format" interface, and if the led screen pixels are fewer than 1920 x 1080, select the first item "Not Change" but if the led screen pixels are more than 1920 x 1080, select the second item "Change" to enter the "Out Format" interface and then select a resolution larger than the on-screen pixels.



Step 4: Click "OK" to enter the "Out 1 Setup" interface and you can enter the width and height of the LED screen loaded in the transmitter card connected with DVI-OUT1.

(Out 1 Setup	
H Size	1024 Step×1	
V Size	1080	
Press	OK to next	

Note: The numerical value can be changed as follows:

1) You can use the knob to adjust it (leftward to decrease while rightward to increase) with the adjustment step

size changed by means of		
	DVI 1 Z Z BRI 4 5	
2) Directly enter the numeric ke	CV1 CV2 USB OUT PART 0	to complete changes.

Step 5: Click "OK" to enter the "Out 2 Setup" interface and you can enter the width and height of the LED screen loaded in the transmitter card connected with DVI-OUT2.

Out 2 Setup		
H Size	1024 Step×1	
V Size	1080	
Press OK to next		

Step 6: Click "OK" to return to the "Main Menu" interface and select "Save".

Save Mode		
★ 【Mode Mode Mode Mode Mode	1 】 2 3 4 5	Note

Step 7: Select "Mode 1", click "OK" and it will prompt "Saved Successfully". That's all for device debugging.

4. Two transmitter cards have two frames enabled;



Step 1: Click on "MENU" to enter the "Main MENU" interface.

Note: Turn the knob and you can select different functions; click "OK" to confirm the selected function.

Step 2: Click "Device Mode" to enter the interface for device mode options and select "Split Mode".

	Device Mode
*	Copy Mode Split Mode Monitor Mode

Step 3: Click "OK" to enter the "Out Format" interface, and if the led screen pixels are fewer than 1920 x 1080, select the first item "Not Change" but if the led screen pixels are more than 1920 x 1080, select the second item "Change" to enter the "Out Format" interface and then select a resolution larger than the on-screen pixels.



Step 4: Click "OK" to enter the "Out 1 Setup" interface and you can enter the width and height of the LED screen loaded in the transmitter card connected with DVI-OUT1.

Out 1 Setup		
H Size	1024 Sten×1	
V Size	1080	
Press	OK to next	

Note: The numerical value can be changed as follows:

1) You can use the knob to adjust it (leftward to decrease while rightward to increase) with the adjustment step size changed by means of

	DVI HDMI VGA BRI MODE 1 2 3 4 5	
2) Directly enter the numeric key	CV1 CV2 USB OUT PART 6 7 8 9 0	to complete changes.

Step 5: Click "OK" to enter the "Out 2 Setup" interface and you can enter the width and height of the LED screen loaded in the transmitter card connected with DVI-OUT2.

Out 2 Setup		
H Size	1024 Step×1	
V Size	1080	
Press OK to next		

Step 6: Click "OK" to return to the "Main Menu". Click the button "PIP" on the front panel and the interface "Layout" will appear; turn the knob to select "POP" and click "OK".



Note: Select "PIP", click "OK" and a red square will appear behind "PIP", which indicates that it has been successfully selected; after selected, it will not jump to the "Main Menu" interface automatically and you need to click on "MENU" to return to the "Main Menu" interface.

Step 7: Click the "MENU" button on the front panel, select "Scaler" in the "Main Menu" to enter the "Image 1 Para" interface and then you can set the location and size of the first image.

Image 1 Para		
H Pos	0	
V Pos	0	
H Size	0	
V Size	0	

Step 8: Click the "WIN2" button on the front panel to enter the "Image 2 Para" interface and you can enter the location and size respectively of the second image.

Image 2	Para
H Pos	0
V Pos	0
H Size	0
V Size	0

Note: After the "Image 1 Para" has been entered, you do not need to click "OK" but just click "WIN2" to enter the "Image 2 Para" interface; after the "Image 2 Para" has been entered, then click "OK".

Step 9: Click "OK" to return to the "Main Menu" interface and then select "Save Mode".

Save Mode			
★ 【Mode Mode Mode Mode Mode	1] 2 3 4 5	Note	

Step 10: Select "Mode 1", click "OK" and it will prompt "Saved Successfully". That's all for device debugging.

Partial debugging

For "Zoom", we often have the LED studio displayed on a full screen and it can be switched to the full display on the computer desk at any time.



Full display



Partial display

Partial debugging shall be carried out after the above-mentioned full-screen debugging has been completed; if no full-screen debugging has been done, please complete full-screen debugging first. Partial debugging includes single or double windows and is not related to the number of transmitter cards.

Note: The following debugging operations are all carried out after the above-mentioned full-screen debugging has been completed.

1. Single-window partial display

Step 1: click on "MENU" to enter the "Main Menu" interface and select "Zoom".



Step 2: Click "OK" to enter the "Zoom" setup interface and you can enter the location and size for partial display.

Zoom Para			
H Pos	0]	
V Pos	0	Step×1	
H Size	0		
V Size	0		

Note: The numerical value can be changed as follows:

1) You can use the knob to adjust it (leftward to decrease while rightward to increase) with the adjustment step



2. Commonly for partial display, we should intercept the LED studio and just enter such numerical values as the starting point x, starting point y, width and height of the LED studio into the horizontal position, vertical position, horizontal size and vertical size.

Step 3: Click "OK" to return to the "Main Menu" interface and then select "Save".

Save Mode			
★ 【Mode Mode Mode Mode Mode	1] 2 3 4 5	Note	

Step 4: Select "Mode 1", click "OK" and it will prompt whether it is overwritten; click on the button to select "Overwrite Mode 1" and it will prompt "Saved Successfully". That's all for device debugging.

Note: Switch between "Partial" and "Full" by means of the button "PART" on the front panel.

2. Double-window partial display



Step 1: click on "MENU" to enter the "Main Menu" interface and select "Zoom".

Step 2: Click the "WIN1" button on the front panel, select "Zoom" in "MENU" to enter the "Zoom Para" interface and then set up the location and size for partial display of the first window.

Zoom Para			
H Pos	0		
V Pos	0		
H Size	0		
V Size	0		

Note: 1. Click "WIN1", then click "Partial Display" and it will pop up the setup interface for partial display of the first window; then, you can enter the location and size respectively for partial display of the first window.

2. The numerical value can be changed as follows:

1) You can use the knob to adjust it (leftward to decrease while rightward to increase) with the adjustment step size changed by means of



3. Commonly for partial display, we should intercept the LED studio and just enter such numerical values as the starting point x, starting point y, width and height of the LED studio into the horizontal position, vertical position, horizontal size and vertical size respectively.

Step 3: Click on the "WIN2" button on the front panel, select the partial display in "Main Menu" to enter the interface "WIN2 Partial Display" and then you can set up the location and size for partial display of the second window.

Zoom Para				
H Pos	0			
V Pos	0			
H Size	0			
V Size	0			

Note: 1. Click "WIN2", then click "Partial Display" and it will pop up the setup interface for partial display of the second window; then, you can enter the location and size respectively for partial display of the second window.

2. The numerical value can be changed as follows:

1) You can use the knob to adjust it (leftward to decrease while rightward to increase) with the adjustment step size changed by means of

	DVI 1 HDMI 2 VGA 3 BRI 4 MODE 5	
2) Directly enter the numeric key	CV1 CV2 USB OUT PART 6 7 8 9 0	to complete changes.

3. Commonly for partial display, we should intercept the LED studio and just enter such numerical values as the starting point x, starting point y, width and height of the LED studio into the horizontal position, vertical position, horizontal size and vertical size respectively.

Step 4: Click "OK" to return to the "Main Menu" interface and then select "Save".

	ç	Save	0p	tions
* [Mode Mode Mode Mode Mode	1】 2 3 4 5		Note

Step 5: Select "Mode 1", click "OK" and it will prompt whether it is overwritten; click on the button to select "Overwrite Mode 1" and it will prompt "Saved Successfully". That's all for device debugging.

Note: To switch the first window between "Partial Display" and "Full Display", just click "WIN1", then click "PART" and you can complete switching partial/full display of the first window; so does the second window.

In addition, if a monitor or TV set needs to be connected for synchronous display of the LED screen contents, just select "Monitor Mode" in the large-screen setting; the rest operations are just the same as the "Copy Mode".

So far, that's for device debugging; you can save the result in a variety of modes and you can call such modes

quickly via the "MODE" button on the front panel.

Thank you again for your purchase of our company's video processor; please refer to the following parts for other settings.

VIII. Control menu

(VI) Advance Main menu menu	(I) Language settings Options English	Ch Drefsault		
	Copy Mode			
(I) Screen settings	Split Mode			
	Monitor Mode			
	Horizontal position	0		
(II) Image	Vertical position	0		
parameters	Horizontal size	1920		
	Vertical size	1080		
	Horizontal position	0		
(III) Partial	Vertical position	0		
display	Horizontal size	0		
	Vertical size	0		
	Save Mode 2			
(IV) Save mode	(IV) Save Save Mode 3			
	Save Mode 4			
	Save Mode 5	Save Mode 5		
	Mode 1			
	Mode 2			
(V) User mode	Mode 3			
	Mode 4			
	Mode 5			

	Chinese		
	settings NO		
(II) Factory settings			
(III) Technical support	Please contact	the sales staff.	
(IV) Output resolution	1024×768@60Hz, 1280×1024@60Hz 1366×768@60Hz, 1440×900@60Hz 1600×1200@60Hz, 1680×1050@60Hz 1920×1080@60Hz, 1920x1200@60Hz 2560×1152@60Hz customizable		
(V) Output settings	Output Port 1 Settings,	Output Port 2 Settings	
	Horizontal position	Default	
(VII) VGA settings	Vertical position	Default	
(VI) VGA settings	Horizontal size	Default	
	Vertical size	Default	
	Brightness	128	
(VII) Brightness settings	Red	128	
(VII) Digitaless settings	Green	128	
	Blue	128	
(VIII) Image static	Image	static	
	Image	active	
	Mute		
(IX) Sound settings	Output		
(iii) Sound Settings	Volume 100		
	Audio sourc	ce settings	
(X) Expert sottings	(I) mode shortcut	Enabled	
(A) Expert settings		Disabled	

				Enat	oled
			(II) Keyboard lock	Disabled	
				Contrast	128
			(III) Contrast settings	Red	128
		(III) Contrast settings	Green	128	
			Blue	128	
		(IV) Switching offects	Direct switching		
		(IV) Switching effects	Special effects		
				Enabled	
		(v) 5	(V) Scheduled task	Disabled	
		(VI) Compatibility	Enat	oled	
		mode	Disal	oled	

The functions of the first five major options have been previously clarified, so no repetition is needed any more and here importance is attached to the meaning of each option in "Advance Menu":



(1) Language options

The language mode is Chinese by default for the video processor and the user can switch Chinese and English in the "Language Settings" menu in "Advance Menu".

(2) Factory Settings

When too much data is stored in a video processor or set in disorder, you can restore its factory settings.

(3) Technical support

Good after-sales services can be provided to our customers.

(4) Output resolution

It will change automatically when you are setting the screen parameters in the navigation bar and you can also select a resolution manually.

(5) Output settings

On-screen pixels loaded on each output port

l	Advance Menu	
*	6.VGA Adjust 7.Bright 8.Freeze 9.Volume 10.Master	1

(6) VGA settings

The VGA signal will suffer from deviation, but it can be solved by means of VGA settings.

(7) Brightness settings

Set the brightness of each image.

(8) Image static

This function includes two types (image static and image active), equivalent to the start and stop functions of a player.

(9) Sound settings

The video processor contains audio output, so you can set the video processor AUDIO as two modes (mute and output) and you can also adjust the volume.

(10) Expert settings

Here include five functions, such as mode shortcut, keyboard lock, play type, play memory and online upgrade.

(1)When the mode shortcut is enabled, the numbers 1-5 on the front panel only correspond to 5 kinds of user modes.

②In order to prevent users' incorrect operation, the video processor is provided the function of keyboard lock and when the function is enabled, you can press MENU for consecutive 6 times to unlock it.

③The video processor is provided with the function of contrast settings and you can directly control the brightness and contrast of the LED led screen, with the details as shown in the table of the control menus.

(4) The switching effects include such two types as direct switching and special effect (fade-in and fade-out). When special effects are applied, the image should be good-looking.

^⑤Enable the scheduled tasks and it can play regularly, with no person necessary for timely operation.

IX. FAQ

Q1. DVI, HDMI, VGA, CV port definitions

A: DVI: Digital (HD) Video Signal Interface – As an interface standard launched in 1999 by DDWG (Digital Display Working Group) founded by Silicon Image, Intel and other relevant companies, it has offered sufficient optimization in terms of speed, definition and HDCP protocol, etc. Its signal sources generally refer to desktops and laptops, etc;

HDMI: High-Definition Multimedia Interface - As a kind of digital video/audio interface technology and a special digital interface suitable for video transmission, it can transmit video and audio signals at the same time with the maximum data transfer rate up to 5Gbps. Its signal sources usually refer to video cameras, notebooks and information release systems, etc.;

VGA: Video Graphics Array (analog video signal) – As a video transmission standard launched by IBM in 1987 together with its PS/2 computer, it has been widely used in the field of color display by virtue of its such advantages as high resolution, fast display and rich color. Its signal sources generally refer to desktops, notebooks, jukeboxes and matrixes, etc.;

CV: Composite Video (also called as Composite Video Signal) – It is a kind of signals with all relevant signals packaged as a whole during transmission. Its signal sources usually refer to video cameras, DVD, TV boxes, jukeboxes, video matrixes and other relevant devices.

Q2: Briefly introduce how to connect the graphics card, video processor, transmitter card, receiver card and LED screen body.

A: Connect the DVI (VGA) output port of the graphics card to the video processor DVI-IN (VGA-IN) – The DVI-OUT of the video processor outputs to the transmitter card – The transmitter card is connected with the terminal receiver card at the back of the screen body by means of a cable – The receiver card is connected with the screen body individually controlled and filled the whole screen by means of cascading.

Q3: How many transmitter cards can be loaded at most in a video processor? There is no PCI card slot provided in a processor, why can transmitter cards be loaded in it?

A: Two transmitter cards at most can be loaded.

The PCI card slot in a computer can only supply the transmitter with power but not transmit video signals and the video processor provides 5V power supply by means of a 4-pin flat cable, so transmitter cards can be installed.

Q4: What does the output resolution mean? Shall we set it well in advance?

A: The output resolution refers to the maximum range of the processor output and its value is OK as long as it is greater than the actual pixels of your LED display; it will change automatically when you are adjusting the image parameters, so basically it doesn't need to be set in advance.

Q5: How to set up the keyboard lock of a video processor? How to unlock it?

A: Click "MENU – Advance Menu – Expert Settings - Keyboard Lock" to lock the keyboard and you can press the MENU button for consecutive 6 times to unlock it.

Q6: What is the administrator password in the host PC software settings?

A: No password is provided and you can just click "OK" to enter directly.

Q7: What possible reasons if the processor software shows that a serial port can not be connected? What can

indicate normal connection?

A: To have your computer control the video processor, you need to connect its instruction transmission line (i.e., serial port line).

If connection has failed, the reasons may be as follows.

① COM Select Error – You need to click "OK" and click on the "Serial Port Enable" button;

② Serial Port Occupied - Two or more software windows can not be opened at the same time;

③ The serial port line is damaged or not firmly connected;

④ The mainboard COM driver or the serial port is damaged.

If the above suggestions are not helpful, please contact our company's customer service staff in a timely manner. We will help you solve the problem as quickly as possible.

Sign of normal connection: It will pop up a dialog box "Software and Device Synchronized" and you just need

to click "OK" at this time.

Q8: The large-screen display is normal if the graphics card is directly connected with the transmitter card, but

after a video processor is connected, a black screen will appear.

A: See whether the transmitter card green indicator is flashing normally; if normal, it indicates that the processor has output signal, and then the possible reasons may be as follows:

(1) There's something wrong with the signal source. You need to set up its copy mode while connecting the computer graphics card, but if not, the graphics card DVI port will have no data output. Setup steps: Disconnect the video processor power - Reconnect the cable from the graphics card to the video processor – The ATI graphics card will read the copy mode automatically, but for an NVIDIA graphics card, you need to enter the graphics card control center and set up multiple display + double-window copy mode.

⁽²⁾ The connecting cable has failed. When the signal line interfaces contact poorly or the wires suffer from internal failures, the led screen will have color bars, fuzzy dots and other abnormalities. Check carefully whether the signal line pins are forced broken or inclined, etc. and replace the signal lines if necessary;

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